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DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD

MAILING ADDRESS:
U.S. COAST GUARD (G-MP-5)
WASHINGTON, D.C. 20590
PHONE: (202) 426-9776

contin

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COMDTNOTE 16000
18 MAR 1981

COMMANDANT NOTICE 16000

CANCELED: 21 SEP 1981

Subj: CH-3 to Volume III - MARINE INDUSTRY PERSONNEL of the Marine Safety Manual, COMDTINST M16000.3 (old CG-495)

1. PURPOSE. This Notice transmits a change to Volume III of the Marine Safety Manual by adding a page and indicating a pen-and-ink correction to part 50-1 of the volume.

2. ACTION.

a. Remove and insert the following page:

| Remove | Insert |
|---|---|
| 50-1:23 | 50-1:23 through 50-1:24, CH-3 |

b. Make the following pen-and-ink correction: Paragraph 50-1-70A(1), page 50-1:5, add the word "apply" after "46 CFR 10.02-33".

c. Make an entry on the "Record of Changes" page at the front of the volume.

3. CHANGES. Suggestions for improvements to the Marine Safety Manual should be made on Form CG-5122 which has been furnished with the manual.

HENRY H. BELL
Chief, Office of Merchant Marine Safety

DISTRIBUTION - SDL No. 112

| | a | b | c | d | e | f | g | h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z |
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NON-STANDARD DISTRIBUTION: (See page 2)

COMDTNOTE 16000
18 MAR 1981

Encl: (1) CH-3 to Volume III, COMDTINST M16000.3

Non-Standard Distribution:

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B:c CCGD12 (mep) only (7)(extra).
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Panama Canal Zone Liaison Officer (1).
DOJ Torts Branch (New York, Washington D.C., San Francisco) (1).
NTSB (Marine Accidents Division) (2).

An original and one copy should be prepared. The original should be forwarded to the Commandant (G-MVP) via the district commander and the copy retained for the office file. However, in the case of form CG-893, an extra copy should be prepared and forwarded to the OCMI who issued the license. The individual's MMD or "BK" and social security number shall be entered after his name. Where an examination is required, these card forms shall be signed on the lower left reverse side by the officer conducting the examination over his typewritten name. When a candidate who has failed a professional examination at one marine inspection or marine safety office is given permission to be examined at another marine inspection or marine safety office, a suitable notation to that effect should be made on the applicable form. When an increase in scope of license is granted, either to an existing license or on renewal, the basis and authority for such increase shall be stated on the reverse sides of forms CG-927A or CG-933 and the card shall be signed by the authorizing officer. When a license is renewed and the information on the face of the new license is identical with that shown on the surrendered license relative to class, grade, and waters, the back side of form CG-927A concerning these matters may be completed by using the word "Same."

## 50–1–185. PREPARATION AND SUBMISSION OF LICENSE TRANSACTION STATISTICS

Each OCMI should maintain a daily log which indicates licensing transactions. Such a log will be of benefit in preparation of accurate monthly summaries which shall be entered on form CG-940 and shall represent the period from the first to the end of each month. Upon completion of the individual entries, totals shall be carefully entered in the recapitulation columns on the reverse side of the form. The report shall be submitted so as to arrive at the office of the Commandant (G-MVP-2) not later than the 15th of the following month, or as may be otherwise directed by the Commandant (G-MVP).

## TABLE 50-1-75A(1).1

### Group A.—Deck Officers' Licenses

| Grade A | License | Waters | Vessel |
|---|---|---|---|
| 1 | Master | Ocean | Steam or motor vessels |
| 2 | do | do | Sail vessels |
| 3 | do | do | Uninspected vessels |
| 4 | do | do | Yachts |
| 5 | do | Coastwise | Steam or motor vessels |
| 6 | do | do | Sail vessels |
| 7 | do | do | Yachts |
| 8 | do | do | Nondescript |
| 9 | do | Great Lakes | Steam or motor vessels |
| 10 | do | do | Ferry vessels |
| 11 | do | do | Yachts |
| 12 | do | Bays, sounds, and lakes | Steam or motor vessels |
| 13 | do | do | Ferry vessels |
| 14 | do | do | Yachts |
| 15 | do | Rivers | Steam or motor vessels |
| 16 | do | do | Ferry vessels |
| 17 | do | do | Yachts |
| 18 | do | | Pilot vessels |
| 19 | do | | Puerto Rican or Hawaiian vessels |
| 20 | do | | Barges |
| 21 | Chief Mate | Ocean | Steam or motor vessels |
| 22 | do | do | Sail vessels |
| 23 | do | Coastwise | Steam or motor vessels |
| 24 | Second Mate | Ocean | Do |
| 25 | do | Coastwise | Do |
| 26 | Third Mate | Ocean | Do |
| 27 | do | Coastwise | Do |
| 28 | Mate | Ocean | Uninspected vessels |

### Group A.—Deck Officers' Licenses — Continued

| Grade A | License | Waters | Vessel |
|---|---|---|---|
| 29 | Mate | Coastwise | Uninspected vessels |
| 30 | do | Great Lakes | Steam or motor vessels |
| 31 | do | Bays sounds, and lakes | Do |
| 32 | do | Rivers | Do |
| 33 | do | | Puerto Rican or Hawaiian vessels |
| 34 | First class pilot | Great Lakes | Steam or motor vessels |
| 35 | Second class pilot | do | Do |
| 36 | First class pilot | Bays sounds, and lakes | Do |
| 37 | Second class pilot | do | Do |
| 38 | First class pilot | Rivers | Do |
| 39 | Second class pilot | do | Do |

### Group B.—Engineer Officers' Licenses

| Grade B | License | Vessel |
|---|---|---|
| 1 | Chief engineer | Steam and/or motor vessels |
| 2 | do | Uninspected motor vessels * |
| 3 | First assistant engr | Steam and/or motor vessels |
| 4 | Second assistant engr | Do |
| 5 | Third assistant engr | Do |
| 6 | Assistant engineer | Uninspected motor vessels * |
| 7 | Engineer of motor vessels operating exclusively in Puerto Rican or Hawaiian waters | Motor vessels |

*These licenses may be further restricted by type of service

**Group C.—Ship Radio Officers' Licenses**
1. License to ship radio officer

**Group D.—Small Passenger Vessel Operators' Licenses**
1. License as Ocean Operator
2. License as Operator on other than Ocean & Coastwise waters
3. License as Motorboat Operator (Uninspected mechanically propelled vessels carrying 6 or less passengers for hire)

**Group E.—Uninspected Towing Vessels**
1. License as Operator (route(s) specified)
2. License as Second-class operator (route(s) specified)



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DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD

MAILING ADDRESS:
U.S. COAST GUARD (G-MP-5)
WASHINGTON, DC 20593
PHONE: (202) 426-9776

COMDTNOTE 16000
22 JUN 1981

COMMANDANT NOTICE 16000

CANCELLED: 22 DEC 1981

Subj: CH-4 to Volume III - MARINE INDUSTRY PERSONNEL of the Marine Safety Manual, COMDTINST M16000.3

1. PURPOSE. This Notice transmits a change to Volume III of the Marine Safety Manual by revising Chapter 52 (Manning of Vessels) and part 51-6 (Qualified Ratings) of the volume.

2. DIRECTIVES AFFECTED. None.

3. ACTION.

a. Remove and insert the following pages:

| Remove | Insert |
|---|---|
| 51-0:1 | 51-0:1 thru 51-0:2, CH-4 |
| 51-6:1 thru 51-6:3 | 51-6:1 thru 51-6:5, CH-4 |
| 52-0:1 thru 52-7:2, CH-2 | 52-0:1 thru 52-7:3, CH-4 |

b. Make the following pen-and-ink correction.

Paragraph 50-2-5B(1)(g), P. 50-2:2, change 2nd sentence to read "As an example, to be considered eligible for a license as unlimited master, the person must not only have had command at sea experience but must also have had not less than six years sea duty".

c. Make an entry on the Record of Changes page to the volume.

DISTRIBUTION - SDL No. 113

| | a | b | c | d | e | f | g | h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z |
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NON-STANDARD DISTRIBUTION: (See page 2.)

COMDTNOTE 16000
22 JUN 1981

4. CHANGES. Suggestions for changes to the Marine Safety Manual should be made on Form CG-5122.

CLYDE T. LUSK, Jr.
Chief, Office of Merchant Marine Safety

Encl: (1) CH-4 to Volume III, COMDTINST M16000.3

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Panama Canal Zone Liaison Officer (1).
DOJ Torts Branch (New York, Washington D.C., San Francisco) (1).
NTSB (Marine Accidents Division) (2).
ABS(1).
MSC (M-22) (1).

# CHAPTER 51 -- CERTIFICATION OF PERSONNEL

Part 51-1 ..... Certification of Personnel--General

51-1-1 ..... Certification of Personnel--Authority
51-1-5 ..... Certification of Personnel--Security Program
51-1-10 ..... Seamen's Records

Part 51-2 ..... Certification of Seamen

51-2-1 ..... (Vacant)
51-2-5 ..... Purpose of Seamen's Documents
51-2-10 ..... Certification of Seamen--Types Of Applications
51-2-15 ..... Certification of Seamen--Procedures For Handling Applications
51-2-20 ..... Completion of Application Form CG-719B
51-2-25 ..... Fingerprints
51-2-30 ..... Additional Requirements For Original Application For Seamen's
..... Documents By Aliens
51-2-35 Applications For Seamen's Documents By Holders of Port Security Cards
51-2-40 ..... Applications For Additional Endorsements On Seamen's Documents
51-2-45 ..... Certification of Seamen--Change of Name
51-2-50 ... Applications For Seamen's Documents By Members of The Armed Forces
51-2-55 ..... Request For Validation of Seamen's Documents
51-2-60 ..... Requests For MMD's From Other Agencies
51-2-65 ..... Forwarding Seamen's Document Applications to HQ
51-2-70 ..... Action By OCMI's on Applications For Seamen's Documents
..... Returned By Headquarters
51-2-75 ..... Vacant)
51-2-80 .....Issuance of MMD's to Employees of The National Oceanic
..... And Atmospheric Administration

Part 51-3 ..... Form CG-2838--Merchant Mariner's Document

51-3-1 ..... Security And Accountability of Blank Forms
51-3-5 ..... Preparation of Form CG-2838--General
51-3-10 ..... Issuance of MMD's

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51-4-1 ..... Original
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51-4-20 ..... Aliens
51-4-25 ..... Radio Officers
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MARINE SAFETY MANUAL

Part 51-5 ..... Continuous Discharge Books

51-5-1 ..... General
51-5-5 ..... Exchange of CDB's For MMD's
51-5-10 ..... Continuation of CDB

Part 51-6 ..... Qualified Ratings

51-6-1 ..... General
51-6-5 ..... Physical Examination For Qualified Ratings
51-6-10 ..... Able Seamen
51-6-15 ..... Qualified Member of Engine Department (QMED)
51-6-20 ..... Lifeboatman
51-6-25 ..... Tankerman
51-6-30 ..... Re-examination of Failures

Part 51-7 ..... Processing of Port Security Cards

51-7-1 ..... Procedures For Processing Applications
51-7-5 ..... Temporary Identification
51-7-10 ..... Renewal of Expired Port Security Card
51-7-15 ..... Replacement of Lost Port Security Card
51-7-20 ..... Replacement of Port Security Cards For Other Reasons
51-7-25 ..... Preparation of Port Security Card
51-7-30 ..... Procedures Following Commandant's Action
51-7-35 ..... Cancellation of Applications
51-7-40 ..... Cancellation Upon Withdrawal of Sponsor
51-7-45 ..... Gold Seal Port Security Cards
51-7-50 ..... Validity Period For Port Security Cards
51-7-55 ..... Other References
51-7-60 ..... Ordering Forms

Part 51-8 ..... Duplicate Merchant Mariner's Documents

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51-8-5 ..... Application For Duplicate Documents
51-8-10 ..... Preparation of Duplicate MMD
51-8-15 ..... Issuance of Duplicate Documents
51-8-20 ..... Mutilated Merchant Mariner's Documents

MARINE SAFETY MANUAL

PART 51-6--QUALIFIED RATINGS

51-6-1. GENERAL

To provide a reasonable degree of safety in the operation of a vessel, it is necessary to ensure that certain members of the crew are qualified to steer the vessel, maintain an efficient lookout, handle the lifeboats, operate the main propulsion plant and necessary auxiliaries, etc. The pertinent statutes are as follows:

- 46 U.S.C. 672 - Able Seamen and Qualified Member of the Engine Department;
- 46 U.S.C. 481 - Lifeboatman;
- 46 U.S.C. 391a - Tankerman.

51-6-5. PHYSICAL EXAMINATION FOR QUALIFIED RATINGS

Form CG-719K shall be used when applicants for the ratings of able seaman, tankerman, or qualified member of the engine department are referred to the U.S. Public Health Service for physical examinations. The results of the examination shall be retained by the OCMI. A notation as to whether the applicant passed or failed the physical examination shall be made on the application, Form CG-719B, in the space provided for USPHS certification.

51-6-10. ABLE SEAMEN (AB)

51-6-10A. MAINTENANCE MAN

Time spent as a maintenance man in the deck department may be credited toward the service required for an able seaman.

51-6-10B. AB ENDORSEMENTS

Only the following endorsements for an able seaman should be entered on Merchant Mariner's Documents:

- AB - Any waters, unlimited;
- AB - Limited
- AB - Special
- AB - Special (OSV)

See 46 CFR 12.05-7(c) and (d) for conversion of prior endorsements to those indicated above.

MARINE SAFETY MANUAL

Part 51-5 ..... Continuous Discharge Books

51-5-1 ..... General
51-5-5 ..... Exchange of CDB's For MMD's
51-5-10 ..... Continuation of CDB

Part 51-6 ..... Qualified Ratings

51-6-1 ..... General
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MARINE SAFETY MANUAL

PART 51-6--QUALIFIED RATINGS

51-6-1. GENERAL

To provide a reasonable degree of safety in the operation of a vessel, it is necessary to ensure that certain members of the crew are qualified to steer the vessel, maintain an efficient lookout, handle the lifeboats, operate the main propulsion plant and necessary auxiliaries, etc. The pertinent statutes are as follows:

- 46 U.S.C. 672 - Able Seamen and Qualified Member of the Engine Department;
- 46 U.S.C. 481 - Lifeboatman;
- 46 U.S.C. 391a - Tankerman.

51-6-5. PHYSICAL EXAMINATION FOR QUALIFIED RATINGS

Form CG-719K shall be used when applicants for the ratings of able seaman, tankerman, or qualified member of the engine department are referred to the U.S. Public Health Service for physical examinations. The results of the examination shall be retained by the OCMI. A notation as to whether the applicant passed or failed the physical examination shall be made on the application, Form CG-719B, in the space provided for USPHS certification.

51-6-10. ABLE SEAMEN (AB)

51-6-10A. MAINTENANCE MAN

Time spent as a maintenance man in the deck department may be credited toward the service required for an able seaman.

51-6-10B. AB ENDORSEMENTS

Only the following endorsements for an able seaman should be entered on Merchant Mariner's Documents:

- AB - Any waters, unlimited;
- AB - Limited
- AB - Special
- AB - Special (OSV)

See 46 CFR 12.05-7(c) and (d) for conversion of prior endorsements to those indicated above.

51-6-10C. CHARACTER OF QUALIFYING SERVICE

46 U.S.C. 672, as amended, defines service on deck as "service in the deck department in work related to the work usually performed aboard vessels by able seamen..." The intent is to advance those persons to the rating of AB based on their familiarity with the various duties and tasks performed by that rating. Generally, the applicant's experience shall be reviewed to ensure that his/her basic experience is within the statutory guidelines. Particular scrutiny shall be accorded to the service presented by an applicant for an "AB - Any Waters, Unlimited" endorsement. For this endorsement, qualifying sea service must have been obtained on self-propelled vessels over 65 feet in length; it is believed that vessels of lesser size do not normally require the performance of duties considered appropriate for unlimited application.

51-6-10D. RATINGS AS BOATSWAIN, CARPENTER. ETC.

The provisions of 46 CFR 12.05-1 that the holder of a Merchant Mariner's Document endorsed as able seaman need not obtain an additional endorsement to serve as boatswain, carpenter, etc., should not be construed as meaning that these ratings have been discontinued for other than able seamen. The rating may be issued at the discretion of the OCMI to an applicant who qualifies for the rating of able seaman by both experience and professional knowledge, but is unable to qualify for certification as able seaman due to moderately defective vision or color blindness. These ratings should not be issued if the applicant does not have at least three years qualifying service or does not pass the required professional examination.

51-6-15. QUALIFIED MEMBER OF ENGINE DEPARTMENT (QMED)

51-6-15A. SEA SERVICE

An applicant for a Merchant Mariner's Document endorsed as a QMED must have a minimum of six months' service at sea in a rating at least equal to that of wiper or coal passer. This service may have been on naval vessels not required to carry certificated men, but duties must have been similar.

51-6-15B. ENDORSEMENT OF QMED RATING

All QMED ratings shall be endorsed separately, except when a seaman has met the requirements for all QMED ratings. Then, the document shall be endorsed "QMED - Any rating."

51-6-15C. APPLICANT EXAMINED FOR OTHER RATINGS AT THE SAME TIME

An applicant for a document as a QMED in the rating of fireman, oiler, or watertender may, if he has the required service and is otherwise eligible, be

examined at the time for all of those ratings for which he is eligible. For example, an applicant eligible for the rating of fireman is also eligible for the examinations for the ratings of oiler and watertender, and should be so certified upon passing the required examination.

51-6-20. LIFEBOATMAN

51-6-20A. TRAINING COURSE

When a Merchant Mariner's Document endorsed as lifeboatman is issued upon completion of an approved course of training in accordance with 46 CFR 12.10-3, the applicant must produce documentary evidence from a responsible official of the school indicating that he has satisfactorily completed the course and that the course included a minimum of 30 hours of actual boat training, including launching, retrieving, exercising safety equipment, and related matters.

51-6-20B. SKETCH FOR USE IN EXAMINATION

A sketch of a metal lifeboat, Form CG-2990, with blank spaces for candidates to indicate parts of the lifeboat, may be used to test the applicant's familiarity with various parts of the lifeboat. The use of this sketch is not mandatory.

51-6-20C. AB -- INCLUDES LIFEBOATMAN

When a certificated lifeboatman is also authorized to serve as able seaman, his Merchant Mariner's Document will bear only the endorsement "able seaman" since this endorsement includes certification as lifeboatman.

51-6-25. TANKERMAN

51-6-25A. AUTHORITY

46 U.S.C. 391a provides that vessels having on board any flammable or combustible liquid cargo in bulk (except public vessels other than those engaged in commercial service) shall have such number of the crew certificated as tankermen as may be required by the Coast Guard, and that such applicants shall meet qualifications prescribed by the Commandant (see 46 CFR 12.20-1 - 12.20-5 for tankerman requirements).

51-6-25B. GRADES AND CLASSES OF CARGO

By definitions in 46 CFR 30.10-15, 30.10-22, and 30.10-39, the Commandant has separated liquid bulk cargo into grades A, B, and C for flammable liquids, grades D and E for combustible liquids, and LFG for liquefied flammable gases.

51-6-25C. DOCUMENTARY EVIDENCE OF SERVICE

An applicant desiring to be certificated as a tankerman to handle any or all of the grades of liquids defined in these regulations should present evidence of experience in handling those liquids for which he desires to be certificated. The application (Form CG-719B) shall identify the documentary evidence showing that the applicant is trained in and capable of performing efficiently the necessary operations as tankerman with the grades of liquid cargo described in the application. The description of experience and identification of supporting documentary evidence should be set forth in the space marked "Service Record."

51-6-25D. EXAMINATION

In addition to showing qualified experience in his application, the applicant shall also be required to satisfactorily complete a suitable examination showing that he has been properly trained in the operations connected with the loading and discharging of those liquids described in the application and is qualified to handle such liquids (see 46 CFR 12.20-5 for examination requirements).

51-6-25E. TANKERMAN ENDORSEMENTS

The endorsement on a Merchant Mariner's Document for the rating of tankerman shall be limited to the grades of liquid cargo and/or LFG, if qualified to handle liquefied flammable gasses, that the applicant is qualified to handle. The endorsements shall be:

- "Tankerman (All Grades and LFG)" if applicant is qualified to handle all types of liquid cargo;
- "Tankerman (Grade A and all lower grades)" if qualified to handle all grades of flammable and combustible liquids;
- "Tankerman (Grade B and all lower grades)" if qualified to handle grades B and C flammable liquids and grades D and E combustible liquids;
- "Tankerman (Grades D and E)" if qualified to handle grades D and E combustible liquids;
- "Tankerman (Grade E)" if qualified to handle only grade E combustible liquids;
- "Tankerman (LFG)" if qualified to handle only liquefied flammable gases;

- "Tankerman (Grades B and all lower grades and LFG)" if qualified to handle such grades of flammable liquids and combustible liquids and liquefied flammable gases;

or similar endorsements which correctly reflect the qualifications of the applicant.

51-6-30. REEXAMINATION OF FAILURES

A candidate who has failed his unlicensed examination should have an opportunity to be re-examined. The following policy should be explained to an applicant who has failed an examination:

- An applicant for a certificate of service or efficiency who has been duly examined and refused a certificate by an OCMI may come before the same OCMI for reexamination at any time thereafter that is determined by the OCMI. The period of time between initial failure and reexamination may vary up to 30 days, depending on the applicant's performance on the initial examination.

- An applicant who has been examined and refused a certificate by an OCMI may not apply for re-examination by another OCMI until 30 days have elapsed from the initial failure.

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PART 52-1 -- GENERAL MANNING PROVISIONS

52-1-1. PURPOSE

This chapter contains information, guidelines, and instructions intended to promote a correct and uniform application of the statutes and regulations as they relate to the manning of inspected and uninspected vessels.

52-1-5. APPLICATION

The material in this chapter shall be used by Coast Guard marine safety personnel to determine vessel manning scales. For this purpose, this material must be used in conjunction with the applicable manning laws and regulations, Commandant Instructions, etc.

52-1-10. AUTHORITY

52-1-10A. INSPECTED VESSELS

Under the provisions of various statutes, the Coast Guard is required to inspect and certificate certain vessels and to ensure the sufficient manning of those vessels for the service in which they are employed. The manning scale for each particular vessel is stated on the Certificate of Inspection (COI) (see 46 CFR 157.15-1, 167.60-15, and 186.05-5).

The principal statutory and regulatory requirements are:

(a) Division into three watches: 46 CFR 157.20-5; 46 U.S.C. 673;

(b) Eight-hour day: 46 CFR 157.20-10; 46 U.S.C. 673;

(c) Able seamen: 46 CFR 157.20-15; 46 U.S.C. 672;

(d) Lifeboatmen: 46 CFR 157.20-20; 46 CFR 33.30; 46 CFR 78.14; 46 CFR 97.14;

(e) Mates: 46 CFR 157.20-25; 46 U.S.C. 223;

(f) Master: 46 CFR 157.20-30; 46 U.S.C. 223;

(g) Radar observers: 46 CFR 157.20-32;

(h) Chief engineers: 46 CFR 157.20-37; 46 U.S.C. 222;

(i) Engineers: 46 CFR 157.20-35, 46 U.S.C. 222, 404, 404a, 405;

(j) Pilots: 46 CFR 157.20-40; 46 U.S.C. 364, 404;

(k) Lookouts: 46 CFR 157.20-45;

(l) Fire patrolmen and cabin watchmen: 46 CFR 157.20-50; 46 CFR 78.30; 46 U.S.C. 470;

(m) Radio officer/radiotelegraph operator watches: 46 CFR 157.20-55; 46 U.S.C. 222, 229a;

(n) Tankermen: 46 CFR 157.10-80; 46 CFR 31.15; 46 U.S.C. 391a;

(o) Operators: 46 U.S.C. 390b, 405b; 46 CFR 157.30-7; 46 CFR 157.30-35; 46 CFR 186; 46 CFR 157.30-45;

(p) Staff officers: 46 CFR 157.20-60; 46 U.S.C. 155, 242;

(q) Qualified members of the engine department: 46 U.S.C. 672(e);

(r) Ordinary seamen: 46 CFR 157.20-15; 46 U.S.C. 672.

52-1-10B. UNINSPECTED VESSELS

Although not inspected or certificated by the Coast Guard, many uninspected U.S. merchant vessels are nonetheless subject to the manning requirements of 46 U.S.C. 224a, 405b, 526f (as amended by the Federal Boating Safety Act of 1971, sec. 22(e)), 672, and 673 (see 46 CFR 157.30-10, 157.30-30, and 157.30-45).

52-1-10C. DELEGATION OF AUTHORITY

The Secretary of Transportation has authorized the Commandant to make provisions for his subordinates to perform the functions required of the Secretary by certain navigation and vessel inspection laws. This has been accomplished by regulations published in Titles 33 and 46, CFR and by administrative instructions issued to personnel concerned.

52-1-15. RESPONSIBILITY OF THE OCMI

Regulations in 33 CFR 1.01-20 provide that the OCMI has the authority and responsibility for the enforcement of vessel inspection, navigation, and seamen's laws within his zone. The flow of marine safety functions from the Commandant to the OCMI is described in 46 CFR 1.01 and 1.05.

Certificates of Inspection (Forms CG-841, CG-3753, and CG 4678) shall state the minimum number of licensed officers and crew members necessary for the safe navigation of inspected vessel as required by 46 U.S.C. 222. It is the responsibility of the OCMI who certificates the vessel to determine what minimum manning requirements are considered necessary for the safe navigation of the vessel, and compliance with the applicable statutes and regulations.

It is necessary for the OCMI who certificates the vessel to consider the following factors in addition to the statutory and regulatory requirements:

(a) Size of vessel;

(b) Route;

(c) Hull and equipment maintenance needs (protective coatings, cargo gear, equipment sophistication, etc.);

(d) Type and horsepower of propulsion machinery;

(e) Maintenance of machinery and equipment;

(f) Degree of automation of deck and engineroom equipment;

(g) Type of cargo;

(h) Cargo transfer system;

(i) Fire protection systems (crew operational requirements);

(j) General arrangement of vessel equipment as it relates to crew operational requirements;

(k) Lifesaving equipment;

(l) Level of qualification of each crew member to perform tasks demanded by the vessel's mission;

(m) Number of passengers carried;

(n) Hazards peculiar to route and service; and

(o) Hours of operation within a 24-hour period;

(p) Successful operation of similar vessels.

52-1-20. ADMINISTRATION

52-1-20A. COOPERATION BETWEEN OCMI's

When a vessel is being certificated in one zone for operation in another, rather than between zones, the development of minimum manning requirements should be coordinated with the OCMI within whose zone the vessel will operate. This procedure will avoid misunderstandings at a later date. Manning on special or unique vessels shall be coordinated with Commandant (G-MVP) to ensure uniformity.

52-1-20B. WAIVERS AND APPEALS

See parts 2-9 and 2-10 (Volume I) of this manual.

52-1-20C. CREW SHORTAGES

46 U.S.C. 222 and 672a provide that a master may "sail short" under certain conditions. The discussion below is based on the provisions of 46 U.S.C. 222.

Initially, a vessel must "possess" the complement stipulated on its COI, including licensed officers. An acceptable evidence of such "possession" is shipping articles on those voyages where articles are required. Vacancies occurring after the effective date/time of the articles for a particular voyage may be covered under the law provided that the vacancy was "without the consent, fault, or collusion of the master, owner, or any person interested in the vessel." In this regard, convenience-type discharges, vacation time allowed in accordance with collective bargaining agreements, etc., are considered consensual actions and are thus not appropriate reasons for sailing short. Cases of desertion, failure to join, death or illness, etc. are considered to be within the "no consent" case. The master may then "sail short" if he considers the remaining complement sufficient to navigate with safety. However, at each port of call during the voyage (including the port of departure), the master must obtain qualified replacements if they are available.

The master need not obtain permission to sail short, but must report the situation to the OCMI within 12 hours of arrival at the port of destination. The master's actions may be evaluated and appropriate administrative action may be taken if warranted. For further information, consult Commandant's Decisions of Appeals Nos. 2136 (Dillon) and 2172 (Chapman).

The provision for a vessel to sail short is not equivalent to operating under a waiver of the minimum manning scale. Waivers are granted under sanction of the Commandant, based upon national security considerations, and obtained prior to the voyage. Sailing short is reported and evaluated after the fact, and national security is not a factor for consideration.

52-1-25. REFERENCES

52-1-25A. STATUTES

Part 2-4 (Volume I) of this manual lists the principal statutes concerning manning, licensing, and certificating of personnel.

52-1-25B. REGULATIONS

The regulations for manning requirements of vessels are contained in 46 CFR 157 (Subchapter P - Manning of Vessels) and 186 (Subchapter T - Rules and Regulations for Vessels of Less Than 100 G.T.). Regulations dealing with the number of certificated lifeboatmen, fire patrolmen, etc. to be carried on specific classes of vessels are contained in Subchapters D (Tank Vessels), H (Passenger Vessels), I (Cargo and Miscellaneous Vessels), R (Nautical Schools), T (Small Passenger Vessels), and U (Oceanographic Vessels) of Title 46, CFR.

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PART 52-2 -- VESSEL MANNING SCALES

52-2-1. GENERAL

To illustrate how various statutes, regulations, court decisions, interpretations, and accepted concepts and practices are translated into minimum manning requirements appearing on a Certificate of Inspection (COI), sample manning scales are presented in this part. It must be clearly understood that these sample manning scales are for conventional (unautomated) vessels and do not invalidate the basic legal requirements. These samples are not mandatory nor are they all-inclusive. They are, however, representative of specific classes of vessels presently certificated. Inquiries and correspondence concerning manning requirements and sample scales should be addressed to Commandant (G-MVP).

52-2-5. MECHANICALLY-PROPELLED PASSENGER VESSELS OVER 100 G.T.

Ocean or Coastwise

1 Master
1 Chief Mate
1 2nd Mate
1 3rd Mate
3 Radio Officers
*6 Able Seamen
*3 Ordinary Seamen

1 Chief Engineer
1 1st Assistant Engineer
1 2nd Assistant Engineer
1 3rd Assistant Engineer
*3 Firemen/Watertenders
*3 Oilers
*1 Patrolman or watchman

*-Certificated Lifeboatmen

* Variables

Lakes, Bays, and Sounds

1 Master & 1st Class Pilot
*1st Class Pilot
*2 Inland Mates
*4 Able Seamen
*2 Ordinary Seamen

*3 Patrolmen or watchmen
1 Chief Engineer
*1 1st Assistant Engineer
*2 Fireman/Watertenders
*2 Oilers

*-Certificated Lifeboatmen

* Variables

Crew (12-hour operation)

| | |
|---|---|
| 1 Master & 1st Class Pilot | *3 Watchmen or patrolmen |
| *1 Inland Mate | 1 Chief Engineer |
| *2 Able Seamen | *1 Fireman/Watertender |
| *1 Ordinary Seaman | *1 Oiler |

*-Certificated Lifeboatmen

* Variables

Great Lakes

| | |
|---|---|
| 1 Master & 1st Class Pilot | 1 Chief Engineer |
| 3 1st Class Pilots | 1 1st Assistant Engineer |
| *8 Able Seamen | 1 2nd Assistant Engineer |
| *3 Firemen | 1 3rd Assistant Engineer |
| *4 Ordinary Seamen | *3 Watertenders |
| *1 Patrolman or watchman | *3 Oilers |
| | *3 Wipers |

*-Certificated Lifeboatmen

* Variables

Rivers

| | |
|---|---|
| 1 Master & 1st Class Pilot | 1 Chief Engineer |
| *1 1st Class Pilot | *1 1st Assistant Engineer |
| *1 Inland Mate | *2 Firemen/Watertenders (NC) |
| *3-Watchmen or patrolmen | *2 Oilers (NC) |
| *8-Deckhands | |

* Variables

VARIABLES:

(1) Mates. The number of licensed mates required on inspected ocean or coastwise vessels depends on the gross tonnage of the vessel (see 46 U.S.C. 233 and 46 CFR 157.20-25).

(2) 1st Class Pilot and Inland Mate. Depending on the ves sel's service, the Inland Mate may not always be required, or the Inland Mate and 1st Class Pilot may be the same person.

(3) Able Seamen. Depending on the size of the vessel and its needs for safe navigation, this number may vary. At least 65% of the deck crew, however, must be Able Seamen (see 46 U.S.C. 672 and 46 CFR 157.20-15).

(4) Ordinary Seamen. This number will vary in proportion to total deck crew.

(5) Able Seamen and Ordinary Seamen. On ocean or coastwise routes, the number of Able and Ordinary Seamen carried must be sufficient to provide for the watch system required by 46 U.S.C. 672 and 46 CFR 157.20-5. Deckhands may be permitted in lieu of Able Seamen and Ordinary Seamen on river routes.

(6) Certificated Lifeboatmen. The number of certificated lifeboatmen must be separately stated on the COI. This number will vary depending on the lifeboat and liferaft requirements for each vessel and will be in accordance with the regulations for the particular class of vessel.

(7) Patrolmen. The number of patrolmen is determined by the number of patrol routes required to cover all parts of the vessel accessible to passengers or crew so that each space will be covered at least once every hour, between the hours of 10 pm (2200) and 6 am (0600) (see 46 CFR 78.30-10).

(8) Watchmen. The number of watchmen is determined by the need to provide a suitable watch to be stationed in the passenger accommodation areas on each deck during the night time (see 46 CFR 78.30-15).

(9) 1st Assistant Engineer. A 2nd or 3rd Assistant engineer may be specified in lieu of 1st Assistant Engineer, when considered appropriate.

(10) Firemen/Watertenders, Firemen, and Oilers. The number and specific ratings will vary based on the number and loca tion of boilers, type of fuel, number of furnaces, arrangement of machinery spaces, type and degree of automation, and (for oceangoing and coastwise vessels) the watch provisions of 46 U.S.C. 673. In the case of motor vessels, no firemen/watertenders are normally required. Vessels operating exclusively on river routes are not required by 46 U.S.C. 672 to carry certificated personnel, but in such cases it is appropriate to include the ratings by name on the COI, followed by "NC" (Not Certificated).

52-2-10. SMALL PASSENGER VESSELS UNDER 100 G.T.

52-2-10A. OCEANS AND COASTWISE

(1) Mechanically or sail-propelled vessels of more than 110 feet in length or carrying more than 150 passengers:

4 Ocean Operators *6 Deckhands

(With 12-hour operation limit, 2 Ocean Operators and *3 Deckhands; see section 52-2-10D concerning oversized vessels.)

* Variables

(2) Mechanically or sail-propelled vessels 110 feet or less in length carrying 150 passengers or less and non-self-propelled vessels:

2 Ocean Operators *2 Deckhands

(With 12-hour operation limit, 1 Ocean Operator and *1 Deckhand.)

* Variables

52-2-10B. INLAND, INCLUDING GREAT LAKES

(1) Mechanically or sail-propelled vessels of more than 110 feet in length or carrying more than 150 passengers:

4 Operators *4 Deckhands

(With 12-hour operation limit, 2 Operators and *2 Deck hands.)

* Variables

(2) Mechanically and sail-propelled vessels 110 feet or less in length carrying 150 passengers or less and non-self propelled vessels:

2 Operators *2 Deckhands

(With 12-hour operation limit, 1 Operator and *1 Deckhand.)

* Variables

VARIABLES:

Due to the number of variables attendant upon the operation of these vessels (number of passengers carried, type of operation, operating season, physical characteristics, etc.), the specific deckhand requirements for particular vessels are best left to the discretion of the OCMI. However, it is not anticipated that any oceangoing or coastwise vessel will have an assigned manning of less than four crewmembers for 24-hr navigation (one ocean operator and one deckhand per 12-hr period).

52-2-10C. OVERSIZED VESSELS

Design refinements coupled with maximum utilization of tonnage exemptions have produced vessels considerably larger than those originally envisioned for certification under 46 CFR, Subchapter T. The increased size of these vessels and the carriage of great numbers of passengers on them has produced a situation where the increased manning scale outlined in sections 52-2-10A and B may be found necessary to provide sufficient competent personnel to adequately cope with emergency situations and provide for the safe navigation of the vessel. It must be remembered that often the "operator" is the only member of the crew who has any documented degree of competency and prior experience. In addition, the operation of oversized vessels on certain routes may call for the inclusion of a radar endorsement on operators' licenses. Determinations in this regard should be requested from Commandant (G-MVP). All amplifying information and specific recommendations should be forwarded via the district commander in each case.

52-2-10D. LAUNCHES OR WATER-TAXI VESSELS

Many hazards, in addition to those encountered in routine underway operations, exist in launch service or water-taxi operations. These hazards are more pronounced on vessels where the operator is the only crewmember on board. Casualty analysis reveals the following potential hazards:

(1) The operator's inability to control or assist debarking passengers while alongside an anchored vessel, as he must remain at the launch or taxi controls;

(2) Seamen returning from shore leave are occasionally under the influence of alcohol and therefore require some supervision. A single operator is not able to provide this additional supervision while underway or maneuvering along side to discharge passengers;

(3) Foreign seamen often do not speak English and may not be able to alert the operator in an emergent situation. An additional crew member would be alert to and able to advise the operator of a man overboard or other similar situation;

(4) It is extremely difficult, if not impossible, for a single operator to maneuver his vessel alongside a man in the water and assist in the recovery operation.

Such hazards should be taken into consideration by certificating OCMIs when prescribing manning levels for these vessels. The need for a deckhand should be closely evaluated.

52-2-15. MECHANICALLY-PROPELLED CARGO AND TANK VESSELS 100 G.T. AND OVER

Ocean and Coastwise

| | |
|---|---|
| 1 Master | 1 Chief Engineer |
| 1 Chief Mate | 1 1st Assistant Engineer |
| 1 2nd Mate | 1 2nd Assistant Engineer |
| 1 3rd Mate | 1 3rd Assistant Engineer |
| 1 Radio Operator | *3 Firemen/Watertenders |
| *6 Able Seamen | *3 Oilers |
| *3 Ordinary Seamen | *3 Tankermen |

*-Certificated Lifeboatmen

* Variables

Lakes, Bays, and Sounds

| | |
|---|---|
| 1 Master and 1st Class Pilot | 1 Chief Engineer |
| 1 1st Class Pilot | *1 1st Assistant Engineer |
| *4 Able Seamen | *2 Firemen/Watertenders |
| *2 Ordinary Seamen | *2 Oilers |
| | *2 Tankermen |

*-Certificated Lifeboatmen

* Variables

Crew (12-hr operation)

| | |
|---|---|
| 1 Master and 1st Class Pilot | 1 Chief Engineer |
| *2 Able Seamen | *1 Fireman/Watertender |
| *1 Ordinary Seaman | *1 Oiler |
| | *1 Tankerman |

*-Certificated Lifeboatmen

* Variables

Great Lakes

| | |
|---|---|
| 1 Master and 1st Class Pilot | 1 Chief Engineer |
| *3 1st or 2nd Class Pilots | 1 1st Assistant Engineer |
| *6 Able Seamen | 1 2nd Assistant Engineer |

| | |
|---|---|
| *3 Ordinary Seamen | 1 3rd Assistant Engineer |
| | *3 Firemen |
| | *3 Watertenders |
| | *3 Oilers |
| | *3 Tankermen |

*-Certificated Lifeboatmen

* Variables

VARIABLES:

(1) Mates. The number of licensed mates required on inspected oceangoing or coastwise vessels is dependent upon the gross tonnage of the vessel (see 46 U.S.C. 223 and 46 CFR 157.20-25).

(2) Able Seamen. Depending on the size of vessel and needs for safe navigation, this number may vary (see 46 U.S.C. 672 and 46 CFR 157.20-15).

(3) Ordinary Seamen. This number will vary in proportion to the total deck crew.

(4) Able Seamen and Ordinary Seamen. On oceangoing and coastwise vessels, the number of Able and Ordinary Seamen carried must be sufficient to provide for the watch provisions of 46 U.S.C. 673 and 46 CFR 157.20-5. Deckhands may be permitted in lieu of Able and Ordinary Seamen on river routes.

(5) 1st Assistant Engineer. A licensed Assistant Engineer may be specified in lieu of the 1st Assistant Engineer when considered appropriate.

(6) Firemen/Watertenders, Firemen, and Oilers. The number and specific ratings will vary based on the number and location of boilers, type of fuel, number of furnaces, arrangement of machinery spaces, type and amount of automation, and (for oceangoing and coastwise vessels) the watch provisions of 46 U.S.C. 673. In the case of motor vessels, no firemen/watertenders are normally required. Vessels operating exclusively on river routes are not required by 46 U.S.C. 672 to carry certificated personnel, but in such cases it is appropriate to include the ratings by name on the COI followed by "NC" (Not Certificated).

(7) Tankermen. Tankermen are required on board all vessels carrying oil or hazardous materials in bulk as cargo or residue (see 46 U.S.C. 391a).

52-2-20. MECHANICALLY-PROPELLED CARGO AND TANK VESSELS UNDER 100 G.T.

Oceans and Coastwise

2 Ocean Operators
*1 Tankerman
*2 Deckhands

(With 12-hr operation limit: 1 Ocean Operator, *1 Deckhand, *1 Tankerman.)

* Variables

Inland, Including Great Lakes

2 Operators
*1 Tankerman
*2 Deckhands

(With 12-hr operation limit: 1 Operator, *1 Deckhand, *1 Tankerman.)

* Variables

VARIABLES:

(1) Deckhands. Due to the number of variables attendent upon the operation of this type of vessel, the specific deckhand requirements are best left to the discretion of the certificating OCMI.

(2) Tankermen. Tankermen are required on board all vessels carrying oil or hazardous materials in bulk as cargo or residue (see 46 U.S.C. 391a).

52-2-25. GREAT LAKES VESSELS - UNLICENSED MEMBERS OF ENGINEERING DEPARTMENT ON UNAUTOMATED VESSELS

The number of unlicensed engineers assigned to a vessel will vary, depending on the degree of automation incorporated into the vessel's design and the reliability of the systems. All manning levels based on automation of the engineering plant must first be approved by Commandant (G-MVP) to ensure uniformity. The following is a general guide which indicates the manning levels typically required on unautomated vessels operating on the Great Lakes.

52-2-25A. COAL-BURNING VESSELS (HAND-FIRED)

Two Boilers--2 Furnaces Per Boiler

3 Oilers
3 Firemen
3 Wipers

Two Boilers--3 Furnaces Per Boiler

3 Oilers
6 Firemen

Three Boilers--2 Furnaces Per Boiler

3 Oilers
6 Firemen

52-2-25B. COAL-BURNING VESSELS (STOKER-FIRED)

3 Oilers
3 Firemen

(This manning is considered adequate for a maximum of 6 furnaces. When more than 6 furnaces are installed, additional personnel should be required.)

52-2-25C. OIL-BURNING VESSELS

3 Oilers
3 Firemen

(If boiler water level is not tended from the engine room, firemen/watertenders shall be substituted for the firemen.)

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PART 52-3 -- OFFICERS

52-3-1. MASTERS

Statutory direction (46 U.S.C. 223) and Coast Guard policy require that a vessel have the full-time services of a master. Various laws, regulations, and customs place responsibilities upon the master of the vessel whether the vessel is underway, at anchor, moored, or handling cargo. Except on small vessels, these responsibilities cannot be properly discharged when the master is in charge of a watch. It is not normally acceptable, therefore, that the master have watchstanding duties in the regular routine of the vessel.

52-3-5. ENGINEERS

46 U.S.C. 404 requires the employment of licensed engineers on vessels of 300 G.T. and above which carry freight or passengers for hire. Although 46 U.S.C. 222 does permit discretion in establishing a manning scale, the following limitations must be strictly observed in exercising such discretion:

(1) Vessels of 300 G.T. and above - May only be used to increase the number of licensed engineers required.

(2) Inland route vessels of less than 300 G.T. subject to 46 U.S.C. 404 - manning may vary from no required licensed engineer to a number adequate to enable manual operation of the engine plant in accordance with the watch provisions of 46 U.S.C. 673;

(3) Oceangoing or coastwise route vessels of less than 200 G.T. (not subject to 46 U.S.C. 224a) - number of licensed engineers may vary within parameters described in paragraph (2);

(4) Oceangoing or coastwise route vessels of 200 G.T. and above - the parameters of (1) above apply.

(NOTE: See 46 CFR 157.20-37 with regard to Chief Engineers.)

These provisions apply similarly to vessels subject to 46 U.S.C. 391a.

Automated engineering systems must meet the criteria of NVC's 1-69 or 1-78 and the provisions of part 52-6 of this manual.

## 52-3-10. RADIO OFFICERS

### 52-3-10A. GENERAL

The requirements for various items of radio communications equipment and qualified operators are basically under the purview of the Federal Communications Commission (FCC). Primary attention shall be given to radiotelegraph officers who are licensed for the FCC and the Coast Guard (46 U.S.C. 229a-h). A notation of the requirement for such persons shall appear on a vessel's COI, but this is considered only a reinforcement of FCC authority. On smaller vessels, radio telephone installations are permitted; however, as radiotelephone operators are licensed solely by the FCC, their presence is not noted on the COI. Information concerning FCC requirements for equipment and personnel qualifications is located in Title 47, CFR.

### 52-3-10B. OCEANGOING AND COASTWISE VESSELS

Generally, oceangoing and coastwise vessels of 1600 G.T. and above, and passenger vessels irrespective of size (unless otherwise exempted), shall have in their complement a licensed Radiotelegraph Officer (see 46 U.S.C. 673, Chapter IV of the 1974 SOLAS Convention, and section 52-5-1B of this manual).

### 52-3-10C. GREAT LAKES

The controlling authority with regard to radio operators on Great Lakes Vessels is found in the Great Lakes Agreement, 3 U.S.T. 4926. This treaty, known as the "Agreement for the Promotion of Safety of the Great Lakes by Means of Radio Between the United States and Canada" came into force on 13 November 1954.

In essence, the Great Lakes Agreement and FCC regulations require that licensed radio operators be carried only on those vessels equipped with and making operational use of radiotelegraph installations. A vessel equipped with a radiotelegraph installation could, if the owners so desire, be navigated lawfully without a radio operator on board, provided no use of the installation is made. If a vessel is not equipped with a radiotelegraph installation (or if having one, does not use it), the vessel must be equipped with an approved radiotelephone installation. This installation is subject to FCC regulations and the vessel must carry crew members licensed for the operation of that equipment. Enforcement of the treaty and the regulations promulgated thereunder is a function of the FCC. It is not incumbent upon the Coast Guard to require on the COI of such a vessel that a person be licensed for radiotelephone operation by the FCC.

52-3-15. DOCTORS

The only statutory requirement for the carriage of a doctor on U.S. merchant vessels is 46 U.S.C. 155, which states that "every steamship or other vessel carrying or bringing emigrant passengers, or passengers other than cabin passengers, exceeding fifty in number, shall carry a duly qualified and competent surgeon or medical practictioner..." Present-day passenger vessels carry only "cabin passengers," so, in effect, doctors are not required on board.

52-3-20. RADAR OBSERVERS

All deck officers (including the master) on radar-equipped vessels of 300 G.T. and above are required by 46 CFR 157.20-32 to be qualified as "Radar Observers" (see section 52-6-55D of this manual).

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PART 52-4 -- UNLICENSED CREW MEMBERS

52-4-1. FIREMEN/WATERTENDERS

Generally, "fireman/watertender" is the appropriate qualification rating for personnel who operate boilers on the majority of today's larger oceangoing steam-powered merchant vessels. Firemen should be specified only for those vessels having such plant installation and layout when other qualified personnel are not always immediately available on watch to carry out the duties and responsibilities for keeping safe boiler water level and adequate feed water supply under all steaming conditions.

52-4-5. DECK ENGINE MECHANICS, ENGINEMEN, OILERS, AND JUNIOR ENGINEERS

The ratings of "deck engine mechanic," "engineman," or "junior engineer" as such will not be required by a COI issued by the Coast Guard. The minimum manning requirements are prescribed by the OCMI in accordance with 46 CFR 157.15-1. The minimum requirements for the engineroom will normally include a number of oilers. However, if the owner, operator, agent, or master of an automated or partially automated vessel requests that the manning of the vessel include a deck engine mechanic or engineman, the COI will carry the requirement as "oiler" as well as a notation in the body of the certificate that "junior engineers, deck engine mechanics, or enginemen may be substituted for one or more oilers." It should be noted that the use of these ratings as substitutes for oilers does not remove them from the watch-standing provisions of 46 U.S.C. 673 and 46 CFR 157.20-50.

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PART 52-5 -- WORKING CONDITIONS

52-5-1. HOURS OF DUTY

52-5-1A. AUTHORITY

Section 2 of the Seamen's Act of 1915, as amended (46 U.S.C. 673) provides for the division of certain merchant vessel personnel into at least three watches while at sea, with no more than eight hours of work required in one day. In the case of radiotelegraph operators, this requirement is applicable only when three or more radio officers are required. Particular attention should be accorded the two-watch provisions relating to tugs, tows, and offshore supply vessels on voyages of less than 600 miles. This provision does not apply to tugs on the Great Lakes.

52-5-1B. WATCHSTANDERS

For purposes of applying the provisions of 46 U.S.C. 673, those unlicensed ratings required to be divided into at least three watches and kept on duty successively for the performance of ordinary work incident to the sailing and management of the vessel, consist of the following:

Deck Department

Able Seaman
Quartermaster
Ordinary Seaman

Engine Department

Oiler
Watertender
Fireman
Coal Passers

Radio Department

Radio Operator (when three or more radio officers are employed)

52-5-1C. CALENDAR DAY

In accordance with an opinion of the Attorney General dated October 5, 1937 (39 Op Atty. Gen. 112), the word "day" in Section 2 of the Seamen's Act of 1915 is to be construed as contemplating a calendar day of 24 hours commencing at midnight.

52-5-1D. "REQUIRED" WORK

The provision that (except on documented tugs on the Great Lakes) seamen may not be required to work more than eight hours in any day, except in case of extraordinary emergency affecting the safety of the vessel and/or life or property, does not prohibit seamen from doing overtime work voluntarily without any coercion or collusion, direct or indirect. It is not anticipated that long hours of overtime will be performed by watchstanders or other members of the crew to the detriment of vessel, crew, or environmental safety. When evaluating overtime to determine if excessive hours are being worked, it is necessary to look at how much of the overtime performed was actually required by the vessel's operation. Overtime accumulated at the request of the seamen or compiled as a result of union agreements which include holiday and penalty overtime must be closely examined and documented. Commandant (G-MVP) shall be advised of any changes to the vessel's existing manning level considered necessary, and shall also be provided with appropriate documentation to ensure that the manning level modifications are applied to all vessels of the class if necessary. In determining special provisions specifically applicable to documented tugs on the Great Lakes, reference should be made to 46 U.S.C. 673.

52-5-1E. TIME ON CALL

A ship's officer who is required to remain on board the ship during the night while the ship is in port is considered to be on duty whether or not he is engaged in actual work during that time. The number of hours during which he is required to be aboard in such circumstances during any calendar day must be included in determining the number of hours he has worked during that day. Similarly, a man who has worked on board ship during the day and stays on board when his turn comes at night, subject to call in case of fire or other emergency, is considered to be on duty within the meaning of 46 U.S.C. 235.

52-5-1F. RELIEF WHILE IN PORT

Technically, the statutory prohibition precluding more than eight hours of required work per day on certain vessels applies to those officers and unlicensed personnel serving in a night relief status. The factor allowing such service is that by accepting employment, the night relief personnel have voluntarily assumed the additional duty.

52-5-1G. MAINTENANCE AND REPAIR PERSONNEL

Maintenance personnel in the deck and engine departments are not amenable to a watch system (see section 52-5-1B). As there is no statutory requirement that the title of the positions in which engaged be identical to those required on the COI, some amount of investigation may be necessary to determine the

watch-nonwatch category of each seaman should the question arise. Generally, deck maintenance personnel are not required by the COI, in that such duties are only remotely concerned with the safe navigation of the vessel. Any deck rating or licensed officer may function in a maintenance position. The same cannot be said for engine maintenance personnel, as their activities in the engineering plant will directly affect the safe navigation of the vessel. As engine maintenance personnel are normally only required on automated vessels, they shall be some form of QMED or licensed engineer.

52-5-5. IN-PORT ENGINEERING WATCHES

52-5-5A. GENERAL

Occasionally, the question arises as to when licensed engineers are required to be aboard under the terms of the COI and the manning requirements of 46 CFR 157 when vessels are not underway. There have been conflicting decisions and varying interpretations made regarding these requirements for vessels in other than a fully navigating status. The regulations specifically exempt vessels from compliance with the regulations under certain circumstances (46 CFR 30.01-5, 70.05-1, 90.05-1, and 175.05-1). The exemptions read identically for vessels "while laid up and dismantled and out of commission."

52-5-5B. GREAT LAKES

The only area for which the Coast Guard has published policy interpreting these regulations is the Great Lakes, where most of the fleet is laid up each winter and it is understood that such vessels pass through the following phases during each yearly period:

(1) Full operating status - The vessel is actually engaged in service;

(2) Laying-up status - The vessel has completed its seasonal service and is in the process of being laid-up for the winter;

(3) Laid-up status - The vessel is inoperable and is essentially laid-up, dismantled, and out of commission for the period and hence qualified for the manning exemption granted by 46 CFR 30.01-5, 70.05-1 and 90.05-1;

(4) Fitting-out status - The laid-up period has ended and the vessel is preparing to enter service.

Vessels in laid-up status are exempted by regulations from Coast Guard inspection; therefore, no attempt to establish requirements shall be made. Vessels in laying-up and fitting-out status should normally be required to have qualified engine department personnel on board in the early stages of fitting out or at any time when plant operation warrants such a requirement.

It is recognized that in many instances vessel status cannot be given such a clear-cut classification. However, the Commandant believes that determination in any case can most appropriately be made on this general policy.

Ultimately, the OCMI's policy should require qualified engine personnel to be on board at any time when plant operation warrants such a requirement. For example, a licensed engineer should be on board while the vessel is moored or tied up over a weekend with various steam auxiliaries in operation.

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PART 52-6 -- TYPES OF VESSELS

52-6-1. AUTOMATED VESSELS

52-6-1A. GENERAL

Insofar as manning proposals based upon varying degrees of "automation" are concerned, it is the Commandant's policy to examine all proposals with an open mind, to grant relief where it can feasibly be done, and to ensure continued safe navigation of the vessel in question by "in-person observation" of the vessel during its actual operation and prior to the making of a firm commitment regarding required manning. The final acceptability of a minimum crew will be based on the degree of automation of the vessel; whether its equipment achieves an acceptable level of reliability; and whether such automation makes provision for the efficient use of fire protection, damage control, boat launching, and other types of equipment necessary for the safe operation of the vessel.

Vessel manning levels which have been reduced due to the installation of automated systems or controls will be increased to conventional levels if the system or controls develop a pattern of unreliable performance. Isolated instances of unsatisfactory operation of minor components should not of themselves occasion an increased manning level. The vessel manning level will be adjusted only in the department affected by the automated system's malfunction, and an appropriate COI Amendment shall be issued. The adjusted manning level will remain in effect until such time as appropriate corrective action has been taken and tested to the satisfaction of a the cognizant OCMI.

52-6-1B. FORWARDING REQUESTS

OCMI's shall forward any requests for reductions in normal required manning which are predicated in any degree upon automation to Commandant (G-MVP), via the district commander, with full background. If not noted in the request, the OCMI's forwarding letter shall indicate the designed degree of automation for the vessel and a statement that the vessel may be so operated with no reduction in safety. Manning proposals for new construction incorporating automated features should be requested from the owner/operator early in the project. Past experience indicates an occasional lack of awareness or understanding of the various statutes and regulations pertaining to the assignment of manning scales. At the extreme, a delay in obtaining and forwarding such information may result in a vessel which cannot physically accommodate the required crew.

52-6-5. BARGE-TOW FERRIES IN RIVER SERVICE

52-6-5A. GENERAL

It is not contemplated that the manning requirements for any barge-tow ferry will be reduced by any OCMI to a one-man operation unless requested by the owners, and then only in those cases where the OCMI, after considering all the circumstances surrounding the request and operation, deems it safe. Some of the criteria that should be considered are:

(1) Make-up of tow (i.e., barge or self-propelled, and method of attachment);

(2) Length of route (i.e., distance, time, location);

(3) Type of passenger traffic and quantity (i.e., school children, regular commuters, tourists or pedestrians);

(4) Arrangement of pilothouse on towboat in relation to barge, particularly in regards to the visibility, whether restricted or unrestricted;

(5) Frequency of service;

(6) Casualty history;

(7) Radio-equipped or not.

52-6-5B. CONDITIONS

One-man operation is permissible if all of the following conditions exist:

- Passenger traffic is predominantly regular, commuter-type traffic in vehicles as opposed to children, tourists, or pedestrians;
- Passengers are required to remain seated in their vehicles to minimize shifting of weight or movement of vehicles;
- The height of the pilothouse is such that an unobstructed view in all directions exists with vehicles on board;
- There is a history of safe operation.

52-6-10. GAS TURBINE-PROPELLED VESSELS

A valid license as engineer of either steam or motor vessels in the requisite grade and horsepower shall be accepted as meeting the manning requirements for

engineer officer on gas turbine-propelled vessels. No special endorsement shall be required on steam or motor engineer's licenses to authorize the holders thereof to serve on gas turbine-propelled vessels.

52-6-15. PUBLIC VESSELS

52-6-15A. U.S. ARMY CORPS OF ENGINEERS VESSELS

At the present time, the manning requirements for all inspected vessels of the Corps of Engineers are determined and stated on the COI in the same manner as for any other inspected vessel. The inspected dredges of the Corps of Engineers are certificated for service on various routes and are manned accordingly. Hopper dredges often operate for extended periods in protected waters, venturing into exposed waters only to change operating areas or to proceed on a short voyage for the purpose of dumping. It is a policy of the Corps of Engineers to allow as many of the off-duty crew members to go on shore liberty as deemed feasible while the vessel is engaged in dredging operations of this type.

To facilitate this policy, the COI should be endorsed to provide for a minimum single crew while the vessels are dredging or dumping; this will also permit the vessels to make short voyages for the purpose of dumping with a single crew on board.

Upon request, the following endorsement shall be made on the COI of a Corps of Engineers dredge:

Lakes, Bays, Sounds, and Rivers

While dredging in lakes, bays, sounds, rivers, or on short coastwise voyages for the purpose of dumping, a minimum of fifteen persons shall be on board the vessel, including all of the following:

| (Steam) | (Diesel) |
|---|---|
| 1 Master | 1 Master |
| 1 Mate | 1 Mate |
| 1 Chief Engineer | 1 Chief Engineer |
| 1 Assistant Engineer | 1 Assistant Engineer |
| 2 Able Seamen | 2 Able Seamen |
| 1 Ordinary Seaman | 1 Ordinary Seaman |
| 1 Fireman/watertender | *1 Oiler |
| 1 Oiler" | |

* Variable

Great Lakes

While operating in Great Lakes, connecting, and tributary waters for the purpose of dredging or dumping, a minimum of fifteen persons shall be on board, including all of the following:

(Diesel)

| | |
|---|---|
| 1 Master & First Class Pilot | 1 Assistant Engineer |
| 1 First Class Pilot | 2 Able Seamen |
| 1 Chief Engineer | 1 Ordinary Seaman |
| | *1 Oiler |

* Variables

52-6-15B. MILITARY SEALIFT COMMAND (MSC) VESSELS

See paragraph 30-12-20C(3) (Volume II) for policy on carriage of persons in addition to the crew.

52-6-20. NUCLEAR VESSELS

Any request for a manning scale applicable to a nuclear powered vessel shall be forwarded to Commandant (G-MVP).

52-6-25. TUGS

Inspected tugs are subject to the provisions of 46 U.S.C. 222 and, if of appropriate size or route, 46 U.S.C. 223, 224a, 405(a), 672, and 673. It should be noted that the number of mates required for oceangoing or coastwise tugs by 46 U.S.C. 223 must be taken in a fashion complimentary to the watch provisions of 46 U.S.C. 673. For example, if a 350 G.T. seagoing tug is engaged in a voyage of less than 600 miles, the two-watch system applies; however, no provision of 46 U.S.C. 223 permits a reduction from the stipulated complement of one master and two mates. Accordingly, the master becomes a non-watchstander. Should the voyage equal or exceed 600 miles, the master must return to a watchstanding status.

The following minimum manning scale is indicative of the required manning for an inspected, motor-propelled tug of less than 1000 G.T. utilizing a high degree of engineroom automation:

| | |
|---|---|
| 1 Master | 1 Chief Engineer |
| 2 Licensed Mates | * Licensed Assistant Engineers |
| 4 Able Seamen | |
| 2 Ordinary Seamen | |

* Variable

52-6-30. PASSENGER BARGES UNDER TOW

In order that effective control may be obtained over the navigation of inspected passenger barges and the safety of the passengers, every inspected passenger barge shall have a requirement for a licensed person in charge and an adequate number of able seamen, ordinary seamen, or deckhands. The number of able seamen, ordinary seamen, or deckhands which will be required will be left to the discretion of the OCMI (subject to the provisions of 46 U.S.C. 672) and will be dependent on the particular vessel and operation (route of vessel, number of passengers to be carried, season of operation, physical characteristics of the vessel, lifesaving equipment carried, etc.).

The requirement for a licensed person in charge of an inspected passenger barge and the appropriate number of able seamen, ordinary seamen, or deckhands, shall be made in the appropriate blocks on the COI (Form CG-841, CG-3752, or CG-4678) issued to each barge. On barges under 100 G.T., regardless of length, at least one barge operator licensed under the provisions of 46 CFR 187 will be required. Barges 100 G.T. and over used solely on inland waters shall be required, as a minimum, to carry a licensed master of passenger barges.

In that there is no specific license examination for masters of non-self-propelled inspected passenger barges 100 G.T. and over, on ocean routes, these cases shall be handled on an individual basis by the OCMI, taking into consideration route, operation, and physical characteristics of the barge.

In situations where the OCMI considers that the responsibilities of the barge master/operator and towing vessel operator/master can be safely vested in one individual on the towing vessel (e.g., towing alongside or on a short hawser), the COI of the barge must be endorsed to indicate the conditions under which the barge master/operator is not required. Additionally, under these circumstances, the endorsement must reflect the requirement that the individual who will be responsible for both vessels be the holder of a license of such scope as to authorize service on both vessels (e.g., a third mate's license would be considered sufficient, but an uninspected towing vessel operator's license alone would not). The following endorsement may be used:

Required Crew
1 Operator of Non-self-propelled Vessels
* Deckhands

NOTE: A licensed operator of mechanically-propelled passenger carrying vessels may be used in lieu thereof, and is permitted to operate the propelling unit. When operating in this manner, the operator of mechanically-propelled vessels

function as the person in charge of both the propelling unit and the passenger barge.

*It should* be stressed that the presence of able seamen or deckhands on the towing vessel in no way alters or alleviates the requirement for the same rated personnel on the barge.

52-6-35. SEAGOING BARGES

The determination as to whether a seagoing barge shall be manned or not shall be made by the OCMI (see 46 CFR 157.30- 1).

Vessels classed as seagoing barges must comply with 46 U.S.C. 673 in cases where the manning level prescribed is based on a safety-at-sea consideration. In this respect, the contemplated duties of the riding personnel should include the periodic checking of the towing gear, the security of cargo, navigation lights, etc. These are safety-oriented functions amenable to a watch routine, as opposed to painting or other similar maintenance functions. (There is, admittedly, a fine line drawn by this illustration; however, the legal decisions relative to this statute are so general in nature as to defy more interpretation than has been provided.) The exercise of good judgment is imperative in determining the true function of the riding crew.

Should it be ultimately decided by the OCMI that safety is the primary task of a riding crew, the number of personnel required or permitted shall be of such a minimum number as to permit the functioning of the watch system as prescribed by 46 U.S.C. 673 (two watches for voyages of less than 600 nautical miles, three watches for voyages of 600 nautical miles or greater). In all cases where such manning is required or allowed, the barge deck crew must be comprised of no less than 65% able seamen as required by 46 U.S.C. 672.

The following sample manning scales are provided to illus trate the foregoing situations:

Voyages of Less than 600 NM*

2 Able Seamen
** (other persons)

Voyages of 600 NM or Greater*

2 Able Seamen
1 Ordinary Seaman
** (other persons)

* One of the crew must hold an appropriate tankerman certificate (this provision is applicable to tank barges only).

** Other persons may be required/permitted depending on the berthing accommodations and lifesaving devices available on the barge.

52-6-40. DUMP SCOWS AND NON-SELF-PROPELLED HARBOR DREDGES, BARGES, ETC. CHANGING PLACE OF EMPLOYMENT

See subpart 30-10-30 (Volume II) of this manual.

52-6-45. SCHOOL SHIPS OPERATED BY FEDERAL OR STATE MARITIME ACADEMIES

52-6-45A. MECHANICALLY-PROPELLED VESSELS OF 100 G.T. AND OVER

46 CFR 167.60-15 provides that the OCMI shall specify in the COI the minimum complement of officers and crew necessary for the safe navigation of school ships.

The following guidelines are offered in the interest of uniformity with regard to establishing minimum manning levels for school ships. However, these guidelines are not intended to preclude the OCMI from exercising individual discretion when prescribing manning levels, particularly in the case of smaller school ships on limited routes:

(1) Licensed Officers - 1 Master, 3 Licensed Mates, 1 Chief Engineer, 3 Assistant Engineers, and 1 Radio Officer (see 46 CFR 310.5 with respect to licensed officers assigned to State maritime academy training vessels). For such vessels operated exclusively in Great Lakes service, master/1st class pilot and pilots shall be utilized in lieu of the deck officers;

(2) Unlicensed Deck Crew - 3 Able Seamen (1 per watch) to supervise cadets in training, and to fulfill the statutory requirement of 46 U.S.C. 672 for Able Seamen at the wheel in waters subject to congested vessel traffic, reduced visibility, adverse weather conditions, or other hazardous circumstances;

(3) Unlicensed Engineroom Personnel - 3 Firemen/Water tenders/Oilers (1 per watch) to supervise cadets in training and to assist the engineer watch officer in meeting contingencies.

(4) Lookouts - Cadets are considered to have equal to or greater qualifications than ordinary seamen. Accordingly, the master may utilize cadets in training as lookouts if he deems them competent to stand a proper lookout.

(5) Lifeboatmen - The regulations in 46 CFR 78.14-10 shall be complied with. Cadets may fill the billets for lifeboatmen, provided they are qualified.

NOTE: Upon successful completion of the service and training requirements, examination, and demonstration of ability as a lifeboatman, an endorsement may be issued on the cadet's Merchant Mariner's Document (MMD) and the cadet may be utilized as a required lifeboatman on board the school's training ship. This policy, however, is not intended to create an administrative burden on OCMI's who issue the MMD to a cadet prior to the cadet's completion of the lifeboatman requirements. Therefore, at such ports, a letter of qualification as lifeboatman may be issued to the cadet by the OCMI in lieu of endorsing the MMD. This letter shall state that the cadet is a qualified lifeboatman and, as such, is qualified to fill the lifeboatmen billets required on the nautical school ship by the COI. In those cases where a cadet is disenrolled from the maritime academy prior to graduation but has previously qualified as a lifeboatman, an MMD shall be issued for entry ratings and lifeboatman, provided proper application is made. A letter of commitment of employment is not required.

52-6-45B. VESSELS OF LESS THAN 100 G.T.

Such vessels shall be manned in general accordance with the standards in paragraph 52-2-10A.

52-6-50. MOTOR-PROPELLED YACHTS

The statutory authority regarding the manning of motor propelled yachts of 300 G.T. and upward operating on the high seas is based in 46 U.S.C. 222 and 224a. 46 U.S.C. 367 makes such a vessel subject to inspection regardless of its documentation or numbering status. The following minimum manning level shall be maintained:

| | |
|---|---|
| 1 Master | 1 Chief Engineer |
| * Licensed Mates | * Licensed Assistant Engineers |
| * Able Seamen | * Oilers "NC" (Not Certificated) |
| * Deckhands | |

* Optional

NOTE: Although 46 U.S.C. 222 provides that personnel may be required in groups of three to support a three-watch system, neither this statute nor 46 U.S.C. 672 may be used to impose a three-watch system on any type of yacht. Similarly, documented seamen may not be required upon any type of yacht (see 46 U.S.C. 690).

## 52-6-55. HYDROFOILS AND AIR CUSHION VEHICLES (ACV'S)

### 52-6-55A. GENERAL (VESSELS UNDER 100 G.T.)

The use of hydrofoils and air cushion vehicles subject to Coast Guard manning and licensing standards has been quite limited. There are no general regulations specifically addressing these vessels, and Coast Guard involvement has been associated only with their use as small passenger vessels. Until more experience is obtained, or until there is a trend toward a wider use of this type of vessel, specific standards for qualifying operators cannot be established.

The ultimate decision as to whether an applicant has received adequate training, and possesses sufficient knowledge and skill to operate a hydrofoil or ACV will rest with the OCMI.

Prospective operators shall be required to hold an operator's license for conventional passenger vessels of commensurate tonnage. Additionally, successful completion of a course of instruction conducted by either the manufacturer or owner of the vessel, accepted by the OCMI, will be normally required (a 7-10 day course of approximately 65 hours is envisioned). Upon completion of the training course, the prospective operator may be required by the OCMI to complete a period of operating experience on board one of these vessels, as specified by the OCMI. For initial operators of the first vessel of a particular type, the OCMI may make special arrangements on a case-by-case basis, so that they may obtain operating experience as required.

### 52-6-55B. TRAINING COURSES

The Coast Guard does not presently require formal approval of training courses for hydrofoils and ACV's. However, prior review and acceptance by the OCMI, who must determine whether such a course meets the desired level of proficiency, is appropriate. It is recommended that the OCMI in whose zone the course is being conducted assign an inspector to participate in or monitor the course to evaluate its effectiveness. The following instruction schedule has been found to be acceptable; however, it is not intended to limit the OCMI's discretion in this regard:

- Classroom Instruction - 40 hours;
- Supervised Vessel Operation - 15 hours;
- Unsupervised Vessel Operation - 5 hours;
- Route Training- 5 hours.

52-6-55C. MANNING

The crew of a hydrofoil or ACV should include two licensed operators with radar endorsements. This will allow one operator to monitor the radar equipment while the other is conning the vessel. The number of deckhands shall be determined by the OCMI, who must consider the size and arrangement of the vessel, its route(s), and its mission. A minimum of four deckhands is envisioned.

NOTE: this manning scheme applies only to vessels under 100 G.T., operating for 12 or less hours. Vessels operating for more than 12 hours at a time require another full crew for relief purposes.

52-6-55D. HYDROFOILS AND ACV'S 100 G.T. AND OVER

Requests relative to the personnel qualification and manning level requirements of large hydrofoils and ACV's, other than those subject to inspection under 46 U.S.C. 390-390g, shall be forwarded along with full background information to Commandant (G-MVP) via the district commander.

Insofar as practical, the manning requirements of hydrofoils and ACV's shall parallel those applied to conventional vessels of a similar trade, route, and tonnage. Special training, radar endorsements, and the two deck officer/operators per watch requirements outlined in the sections above shall apply. Unique machinery installations may require special training for engineering department personnel. An appropriate marine license/certificate shall be held by all personnel required by the COI.

52-6-60. OFFSHORE SUPPLY VESSELS (OSV'S)

The following manning scale is generally applicable to OSV's of 100 G.T. and above, as defined by 46 U.S.C. 404-1 (see 46 CFR 157.10-87):

Ocean and Coastwise

| | |
|---|---|
| 1 Master | 1 Chief Engineer (200 G.T. +) |
| 2 Mates | *2 Assistant Engineers |
| 2 Able Seamen | *3 Oilers |
| 1 Ordinary Seaman | |

Crew (Voyages of less than 600 miles)

| | |
|---|---|
| 1 Master | 1 Chief Engineer (200 G.T.+) |
| 1 Mate | *1 Assistant Engineer |
| 1 Able Seaman | *2 Oilers |
| 1 Ordinary Seaman | |

* Variables, based on degree of engineering automation.

52-6-65. DREDGES

Commercial dredges are subject to inspection and manning requirements because they are propelled by steam or are seagoing motor vessels (per 46 U.S.C. 367). As such vessels are generally 100 G.T. and above, the standards in subpart 52-2-15 shall be applied in establishing manning standards. The following endorsement may be appropriate:

"When dredging in lakes, bays, sounds, or rivers exclusively, or when engaged in a coastwise voyage of [specific number, not to exceed 400 miles] miles for the purpose of dumping dredge spoil, the minimum manning shall be":

| Steam | Diesel |
|---|---|
| 1 Master | 1 Master |
| 1 Mate | 1 Mate |
| 1 Chief Engineer | 1 Chief Engineer |
| 1 Assistant Engineer | 1 Assistant Engineer |
| 2 Able Seamen | 2 Able Seamen |
| 1 Ordinary Seaman | 1 Ordinary Seaman |
| *2 Firemen/Watertenders | *2 Oilers |
| *2 Oilers | |

* Variables, based on degree of engineering automation.

NOTE: Vessels operating exclusively on river routes are not required to carry certificated personnel (see 46 U.S.C. 672), but in such cases it is appropriate to include the ratings by name on the COI with the endorsement "NC" (Not Certificated).

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PART 52-7 -- UNINSPECTED VESSELS

52-7-1. GENERAL

Plate 52-7-1.1 is a matrix of the manning requirement references that apply to various types of documented uninspected vessels. The matrix is divided into two charts: vessels under 200 G.T., and vessels 200 G.T. and above. These charts are not meant to be all-inclusive and should only be used as a general guide.

It should be noted that the provisions of 46 U.S.C. 235 for watch duty of deck officers do not apply to uninspected vessels, regardless of size. It should also be noted that undocumented, uninspected oceanographic research vessels are not subject to the provisions of 46 U.S.C. 224a nor 46 CFR 157.30-10. However, if these vessels are 100 G.T. or above they are subject to 46 U.S.C. 672 and 673.

52-7-5. TUGS

Uninspected tugs are generally subject only to the provisions of 46 U.S.C. 405(b) regarding licensed operators. Seagoing tugs of 200 G.T. and above are subject to 46 U.S.C. 224a, and employment of an Operator of Uninspected Towing Vessels is not permitted. The watch system requirements of 46 U.S.C. 673 for voyages of 600 miles or more create a curious situation when applied to a seagoing tug in the 100- to less than 200 G.T. range. Operators may be employed as "officers" and, in accordance with 46 U.S.C. 405(b), are subject to the two-watch requirement. However, unlicensed deck personnel, coal passers, firemen, oilers, and watertenders are subject to the three-watch system.

52-7-10. MOTOR-PROPELLED YACHTS AND FISHING VESSELS

Uninspected documented yachts and vessels engaged exclusively in fishing, of 200 G.T. and above, are subject to 46 U.S.C. 224a. The following manning scale should be required for these vessels:

| | |
|---|---|
| 1 Master | 1 Chief Engineer |
| *1 Licensed Mate | *1 Licensed Assistant Engineer |

* Optional

As these vessels are not subject to inspection, there is no mechanism to prescribe a manning scale. The controlling statute is not a positive manning statute in that it requires only those persons purporting to be officers to

hold licenses befitting their positions. Further, 46 U.S.C. 690 grants exemption from those statutes traditionally used to establish manning scales (46 U.S.C. 672 and 673).

Undocumented (i.e., Federally- or State-numbered) seagoing yachts of less than 300 G.T. are not subject to the requirements of 46 U.S.C. 224a. Yachts and vessels engaged exclusively in fishing, of any size and regardless of documentation/numbering status, are not subject to any Federal law concerning manning, licensing, or certification of personnel.

TABLE 52-7-1.1
Manning Requirements References for Documented Uninspected Vessels

| | A. VESSELS UNDER 200 GT | | | | B. VESSELS 200 GT AND OVER | | | |
|---|---|---|---|---|---|---|---|---|
| | 46 U.S.C. 224a 46 CFR 157.18-1 | 46 U.S.C. 405(b) 46 CFR 157.30-45 | 46 U.S.C. 672 46 CFR 157.20-15 | 46 U.S.C. 673 46 CFR 157.20-5 46 CFR 157.20-10 (Applicable only to vessels 100 GT or over) | 46 U.S.C. 224a 46 CFR 157.18-1 | 46 U.S.C. 405(b) 46 CFR 157.30-45 | 46 U.S.C. 672 46 CFR 157.20-15 | 46 U.S.C. 673 46 CFR 157.20-5 46 CFR 157.20-10 |
| FISHING AND WHALING VESSELS | | | | | X | | | |
| YACHTS | | | | | X | | | |
| VESSELS ENGAGED IN SALVAGE OPERATIONS | | | X | | X | | X | |
| TOWBOATS | | X (a)(c)(d) | X | X (b) | X (e) | X (d) | X | X |
| TOWBOATS ON VOYAGES OF LESS THAN 600 MILES | | X (a)(c)(d) | X | X (f) | X (e) | X (d) | X | X (f) |
| ALL OTHER UNINSPECTED MERCHANT VESSELS | | | X | X | X | | X | X |

a) Uninspected towing vessel operators are not subject to the three watch system provisions of 46 U.S.C. 673, however they are limited by the 12 hour provisions of 46 U.S.C. 405(b).

b) Sailors, coal passers, firemen, oilers and water tenders on towing vessels are subject to the three watch system of 46 U.S.C. 673.

c) Towing vessels under 200 gross tons engaged in the oil and mineral exploitation industry are not subject to the provisions of 46 U.S.C. 405(b) relating to licensed operators.

d) The officers who satisfy the requirements of 46 U.S.C. 224a also satisfy the requirements of 46 U.S.C. 405(b).

e) This applies only to towboats 200 gross tons and over navigating on the high seas. Operators licensed solely under the provisions of 46 U.S.C. 405(b) do not meet the requirements of 46 U.S.C. 224a.

f) Licensed officers and members of the crew other than coal passers, firemen, oilers and water tenders while at sea will be divided into not less than two watches.

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**DEPARTMENT OF TRANSPORTATION**
**UNITED STATES COAST GUARD**

MAILING ADDRESS
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COMDTNOTE 16000
21 JUL 1981

COMMANDANT NOTICE 16000

CANCELLED: 21 JAN 1982

Subj: CH-5 to Volume III - MARINE INDUSTRY PERSONNEL of the Marine Safety Manual, COMDTINST M16000.3

1. PURPOSE. This Notice provides a revised index to Volume III - MARINE INDUSTRY PERSONNEL of the Marine Safety Manual.

2. ACTION. Remove the old index, pages III:1 through III:10 and insert the new index, pages III:1 through III:9 CH-5; make an entry on the "Record of Changes" page at the front of the volume.

CLYDE T. LUSK, JR.
Chief, Office of Merchant Marine Safety

Encl: (1) CH-5 to Volume III, COMDTINST M16000.3

**DISTRIBUTION - SDL No.** 113

| | a | b | c | d | e | f | g | h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z |
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| C | | | | | * | | 2 | | * | | | 2 | * | | | | | | | | | | | | 1 | |
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| H | | | | | | | | | | | | | | | | | | | | | | | | | | |

* NON-STANDARD DISTRIBUTION: (See page 2)

COMDTINST M16000.3

21 JUL 1981

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